

Work Order ID 159602

Thursday, April 13, 2017 2:31:43 PM

159602

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Item ID: D3280-3L02 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Floor Protector, RH
Start Date: 4/27/2017 Start Qty: 2.00 *2* Cust Item ID:
Required Date: 5/3/2017 Req'd Qty: 2.00 *2* Customer:
Reference: SCHEDULED

Approvals: Process Plan: DAS 21 Date: APR 18 2017 Tooling: _____ Date: _____ Run Start *NR1*
QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3280	Rev F								<u>DAS 07 9-89</u>
100	HAND FINISHING THERMOFORMING	0.00				<u>2</u>			<u>17/04/20</u>
100									
Thermoform	Memo	0.13							
Thermoforming Machine	Cut Blanks								
105	Dry Material	0.00				<u>2</u>			<u>DAS 07 9-89</u>
105									
HandThermo	Memo	0.00							
Hand Finishing Thermoforming	Dry Sheet as per QSI022 POLYCARBONATE								<u>17/04/20</u>
	Temp: <u>245 deg. F</u>								
	Time IN: <u>5:00 PM</u>								
	<u>6:00 AM</u>								
	Time OUT: _____								
	<u>Per.....</u>								

APR 20 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

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Item ID:	D3280-3L02	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:						
Item Name:	Floor Protector, RH				Stop	*NS2*
Start Date:	4/27/2017	Start Qty:	2.00	*2*	Cust Item ID:	
Required Date:	5/3/2017	Req'd Qty:	2.00	*2*	Customer:	
Reference:	SCHEDULED					

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
150	Memo	0.04				Z			
QC									
Quality Control									MAY 17 2017
160	Packaging	0.00							
160	Memo	0.00		SX		2			DAS 6 9-89 MAY 18 2017
Packaging									
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170	Memo	0.20							17/5/18 DAS
QC									
Quality Control									DAS 21 9-89 MAY 18 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 159602

159602

Parent Item: D3280-3L02

D3280-3L 02

Parent Item Name: Floor Protector, RH

Start Date: 4/27/2017

Required Date: 5/3/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev. C Added colour code to D3280-3 11/03/03 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-02		Purchased	No			100	sf	661.8064	4.333	9.122105			DAS 07 9-89

MI FXS 093-F6006-02

GE PLASTICS LEXAN SHEET (BLACK)

Location

Loc Qty

Loc Code

therm

661.80637

m127208

661.80637

9.123 sq ft.

17/04/20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

DART AEROSPACE LTD		Work Order: 159602
Description: R22 Floor Protector, RH		Part Number: D3280-3
Inspection Dwg: D3280	Rev: F	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than 0.1875"	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

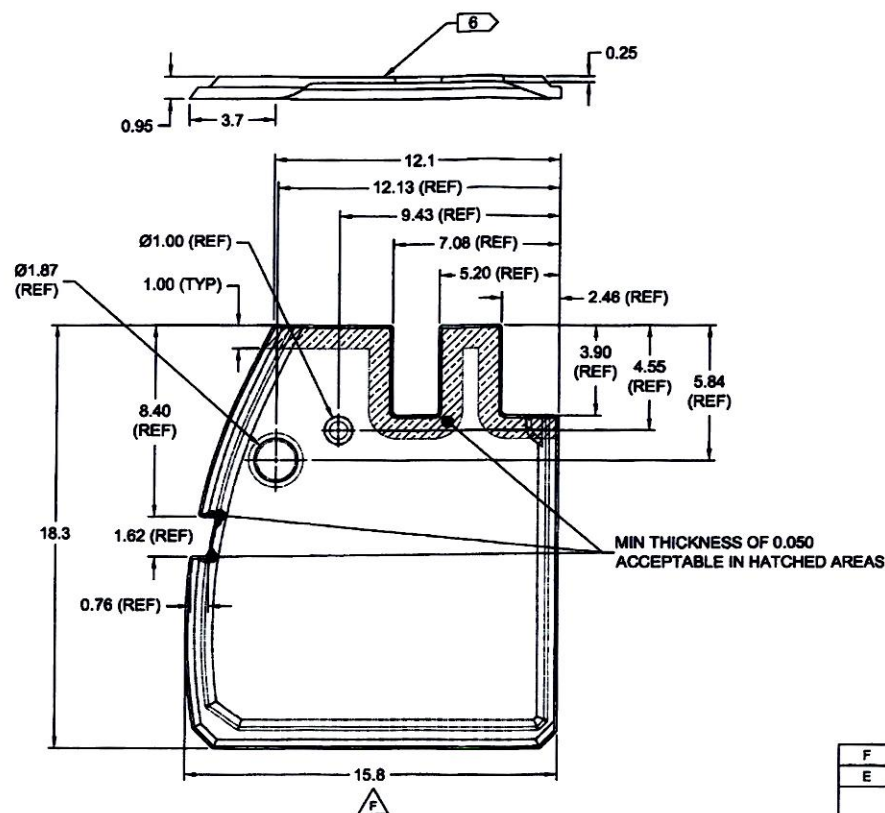
Measured by:	DAS 07 9-89	Date: 17/04/20
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TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
18.3	+/-0.100	18.4"	✓			
15.8	+/-0.100	15.9"	✓			
12.1	+/-0.100	12.2"	✓			
0.95	+/-0.030	0.946"	✓			
0.25	+/-0.030	0.247"	✓			
0.070	Min	0.080"	✓			
0.050	Min	0.061"	✓			

Measured by:	DAS 07 9-89	Date: 17/05/16
Audited by:	DAS 38 9-89	Date: MAY 17 2017
Preliminary Approval:		Date:

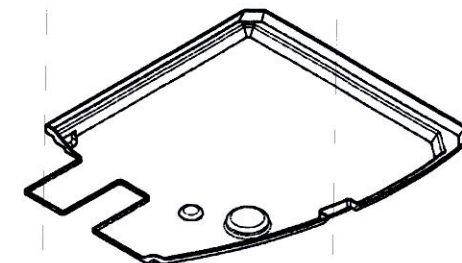
Rev	Date	Change	Revised by	Approved
A	08.01.16	New Issue	KJ/DL	
B	08.04.16	Dimensions updated per Dwg Rev D	KJ/DL	
C	11.04.28	Dwg Rev updated	KJ	
D	15.04.24	Dwg Rev updated	KJ	



D3280-1 FLOOR PROTECTOR

D3280-1 NOTES:

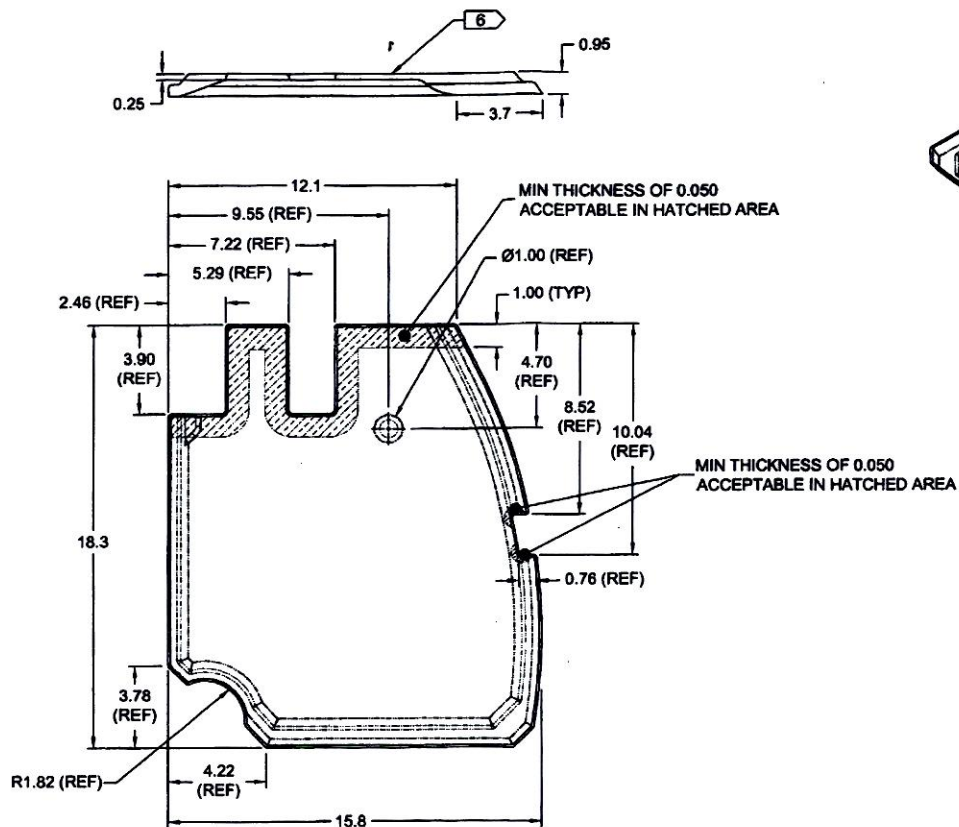
- 1) MATERIAL: -1L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-1L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3280-1Lxx" AND B/N PER QSI 044 6.4
- 7) WEIGHT: D3280-1L02 = 0.94 lb D3280-1L08 = 1.13 lb
- 8) THERMOFORM WITH MOLD D3280-1T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 159602 MJS
1704-18

RELEASED
2013-02-15

F	REVISE DIM 18.0 TO 15.8 (ZN 85-1) AS PER CIR12-9	SFM	13.02.05
E	REVISE NOTES (ZN A8-1, A8-2)	RF	11.03.01
D	THICKNESS 0.093 WAS 0.125, MIN. THICKNESS 0.070 WAS 0.080, P/N & B/N ID WITH VIBRATING STYLUS (ZN A7-1, A7-2); CORRECT WEIGHTS (ZN A8-1, A8-2); HOLE SIZE Ø1.88 WAS Ø0.211 (ZN C7-1)	PH	08.03.28
C	UPDATE DIMS TO MATCH PARTS; COLOUR 701 WAS 700; GENERAL UPDATE	LE	07.10.12
B	NOW LEXAN; DIMS AS MANUFACTURED	CP	05.11.25
A	NEW ISSUE	CP	04.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SFM		
CHECKED	MS	DRAWING NO.	REV. F
MFG. APPR.	MS	D3280	SHEET 1 OF 2
APPROVED	MS	TITLE	SCALE
DE APPR.	MS	FLOOR PROTECTOR	NTS
DATE	13.02.05	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR OTHER OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D3280-3 FLOOR PROTECTOR

D3280-3 NOTES:

- 1) MATERIAL: -3L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-3L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3280-3Lxx" AND B/N PER QSI 044 6.4
- 7) WEIGHT: D3280-3L02 = 0.88 lb D3280-3L08 = 1.03 lb
- 8) THERMOFORM WITH MOLD D3280-3T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

RELEASE
2013-02-19
MA

DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D3280	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR PROTECTOR	NTS
DATE	13.02.05	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	